

# CIV-SERIES

## Commercial Reverse Osmosis Systems



CIV-8000

### Applications

- ▶ Drinking water
- ▶ Water vending
- ▶ Greenhouses
- ▶ Laboratory process
- ▶ Commercial food preparation
- ▶ Misting systems
- ▶ Humidification
- ▶ Restaurants
- ▶ Boiler feed
- ▶ Hydroponics
- ▶ Available in 2000, 4000, 6000, 8000 and 10,000 gpd configurations.
- ▶ Low energy, high flow membranes.
- ▶ Microprocessor Controls - Built-in TDS monitor, pre-treat lockout, tank full contacts and low pressure monitoring.
- ▶ Flowmeters - Product, brine and recirculation meters allows operator to adjust product-to-waste ratio, monitor system performance.
- ▶ Valves - Stainless steel brine and recirculation valves for accurate recovery adjustment.
- ▶ Pressure Gauges - Stainless steel, glycerin filled gauges for system in/out and filter pressure.
- ▶ Frame and Panel - Welded, powder coated steel frame with lightweight, corrosion resistant control panel.
- ▶ Vessels - Corrosion resistant stainless steel vessels. PVC available.
- ▶ Pump and Motor - Stainless steel pump and motor for efficient, continuous high pressure operation.
- ▶ Low Pressure Switch - Protects the pump when feed pressure is insufficient.
- ▶ Quality checked and wet tested before shipment.
- ▶ Manufactured in the USA.

### SYSTEM SPECIFICATIONS

| Model Number           | CIV-2000                    | CIV-4000 | CIV-6000                    | CIV-8000 | CIV-10000 |
|------------------------|-----------------------------|----------|-----------------------------|----------|-----------|
| Capacity (gpd)         | 2,000                       | 4,000    | 6,000                       | 8,000    | 10,000    |
| Membrane Type          | Thin-film, 4" x 40"         |          |                             |          |           |
| Number of Membranes    | 1                           | 2        | 3                           | 4        | 5         |
| Membrane TDS Rejection | 98%                         |          |                             |          |           |
| Electrical Supply      | 110/220v, 50-60 Hz, 3 phase |          |                             |          |           |
| Motor Rating           | 1.0 HP                      | 1.5 HP   | 2 HP                        | 3 HP     | 3 HP      |
| Pump                   | Stainless steel centrifugal |          | Stainless steel multi-stage |          |           |
| Dimensions             | 60" H x 22"W x 20"D         |          |                             |          |           |
| Weight (lbs)           | 275                         | 295      | 345                         | 370      | 395       |

Based on membrane performance at 77°F, 500ppm TDS, 150 psig and 50% recovery. Membrane performance may vary ±15%. Potential membrane foulants such as Iron, Hydrogen Sulfide and Manganese must be removed from the feed stream prior to the system.

### OPERATING SPECIFICATIONS

|                            |            |
|----------------------------|------------|
| Feed Pressure              | 15-100 psi |
| Max Operating Pressure     | 250 psi    |
| Max Temperature            | 100°F      |
| Max Chlorine (continuous)  | <0.1 ppm   |
| Max Total Dissolved Solids | 5,000 ppm  |
| pH Range                   | 3-10       |
| pH Range (optimum)         | 5-8        |
| Turbidity                  | <1.0 NTU   |
| Silt Density Index         | <5.0       |
| Iron                       | 0 ppm      |
| Hydrogen Sulfide           | 0 ppm      |
| Manganese                  | 0 ppm      |

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### System Upgrades

- ▶ Sediment filtration
- ▶ Chlorine removal
- ▶ Chemical injection
- ▶ Softening
- ▶ GAC post-treatment
- ▶ Ozone treatment
- ▶ Product storage tank
- ▶ Tank level controls
- ▶ Repressurization system
- ▶ Automatic flush
- ▶ Cleaning skid
- ▶ UV treatment